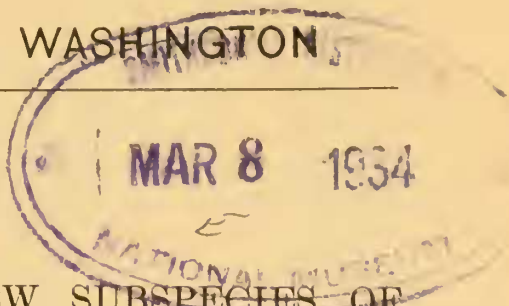


PROCEEDINGS
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DESCRIPTIONS OF THREE NEW SUBSPECIES OF
BIRDS FROM MEXICO AND GUATEMALA.

BY E. W. NELSON.

The collections of birds made for William Brewster many years ago in western Chihuahua and southern Sonora, Mexico, has yielded numerous types of previously unknown birds. Two of the subspecies here described are from this same source. The long, deep, north and south canyons along the western slope of the Sierra Madre in Chihuahua and bordering parts of Sonora have their heads toward the Arizona border and the small rivers flowing southerly down them turn westerly and flow into the Pacific through southern Sonora. The southern parts of these canyons reach the border of the tropical zone, and a considerable number of tropical species of birds from the western basal slopes of the Sierra Madre to the south extend their range northward up these deep hot canyons. The *Aratinga* and *Hesperiphona* here described are both of tropical origin and must have arrived at this northern extremity of range along this route, for their nearest relatives are known only from the eastern coastal slope of Mexico, on the far side of the Mexican tableland. So far, however, there appears to be no record of either of these forms having been taken elsewhere in western Mexico, although work has been done in that region by a number of good collectors. It appears obvious from the material secured by Brewster's collectors that further work in western Chihuahua, southern Sonora, and eastern Sinaloa would be fruitful in valuable additions to our knowledge of the bird life of a most interesting region. In the 80's when Brewster's collectors visited this region it was difficult of access, but to-day a railroad extending from

Chihuahua City to Jesus Maria, one of Brewster's main localities, and the Southern Pacific extending from Arizona south through middle Sonora and Sinaloa render work in that entire region very simple. I know of no better opportunity for American ornithologists who desire to work south of our borders. It is a wonderfully picturesque region with a healthy climate.

I take pleasure in acknowledging the courtesy of the Museum of Comparative Zoology, through Ostrum Bangs, for the opportunity of using the material from the Brewster collection, and to Dr. Charles W. Richmond, of the U. S. National Museum, for the material in that collection.

Aratinga holochlora brewsteri, subsp. nov.

BREWSTER PAROQUET.

Type from Hacienda de San Rafael, western Chihuahua, Mexico. No. 24700, ♂ adult, Museum of Comparative Zoology (Brewster collection), collected May 5, 1888, by M. Abbott Frazar.

General characters.—Similar in size to typical *holochlora* from eastern Mexico but with smaller bill and much clearer, less yellowish, green on upper and underparts, with a wash of bluish on crown and breast.

Color of type.—Upperparts of head, body, tertiaries, and outer parts of secondaries bright chromium green of Ridgway, with top of head slightly darker and washed with bluish; upper side of primaries and tail feathers darker, more bluish green than back; sides of head and neck clearer, paler green than back; underparts from chin to crissum cosse green of Ridgway, lacking nearly all of the oil-green suffusion so strong in typical *holochlora* and washed with bluish on breast; underside of wings and tail lighter and more greenish than in latter; outer edges of primaries and primary coverts more bluish.

Measurements of type.—Wing, 168 mm.; tail, 134; culmen, 24.5; tarsus 16.

Measurements of typical holochlora, ♂ adult, from Hacienda Mirador, Vera Cruz.—Wing, 167; tail, 138; culmen, 25; tarsus, 17.

Specimens examined of A. h. brewsteri.—8, all from the type locality, in Museum Comparative Zoology: Specimens of *A. h. holochlora* 6, 1 from Mirador, Vera Cruz, Mexico; 5 from Forlon, Tamaulipas, Mexico.

Remarks.—This well marked geographic race is separated by the breadth of the Mexican tableland from its nearest relative, typical *holochlora*, in the tropical parts of western Vera Cruz and Tamaulipas. No records are known to the writer of its occurrence elsewhere, than at the type locality, in western Chihuahua.

Three specimens of typical *holochlora* out of six examined, one from Mirador and two from Forlon, have scattered red or orange feathers about the sides of the head and neck; no such colors appear on any of the

specimens of *brewsteri*. This subspecies is named in honor of William Brewster.

***Hesperiphona abeillii pallida*, subsp. nov.**

CHIHUAHUA GROSBEAK.

Type from Jesus Maria, Chihuahua, Mexico. No. 22053, ♀ adult, Museum Comparative Zoology (Brewster collection). Collected June, 1883, by R. R. McLeod.

General characters.—This subspecies much paler and grayer than the females of either typical *abeillii* or *H. a. cobanensis* described below from Guatemala; upperparts of body dull grayish brown with only a trace of the conspicuous greenish suffusion in both other forms; underparts nearly uniform pale grayish brown with only a slight trace of the strong buffy brown shade in the others and lacking the greenish yellow mixture on breast; wing longer than in other forms.

Colors of type.—Top of head dull black; sides of head, sides and top of neck and upperparts of body dull brownish thinly suffused with dull greenish, strongest on sides of head and on neck; lower rump much duller than in *abeillii*; underparts from chin to abdomen nearly uniform dull drab gray, becoming paler posteriorly to under tail coverts, with only slight traces of greenish on breast; axillaries much paler yellow than in typical *abeillii*.

Measurements of type.—Wing, 107; tail, 63; culmen, 21; tarsus, 20.5. Measurements of typical ♀ adult, of *abeillii*, No. 158336, U. S. National Museum (Biological Survey collection) from Huachinango, Puebla, Mexico: Wing, 103; tail, 63; culmen, 22; tarsus, 22.

Remarks.—As in the case of *Aratinga holochlora brewsteri* the present subspecies appears to be widely separated from its nearest relative, typical *holochlora*, by the entire breadth of the Mexican tableland. Possibly both these geographic races may be found ranging far south of their known habitats along the mountains of Sinaloa, but so far none of the various collectors in that region appear to have found them.

Although this subspecies is based on a single specimen, an adult ♀, in breeding plumage, it differs so strongly from the females of both the other forms examined, and differs along the usual lines of paler coloration due to the more arid character of its habitat, combined with its extraordinarily wide separation from the habitat of its nearest relative leaves no doubt as to the meaning of its characters.

Specimens examined.—*H. a. pallida*, 1 adult ♀. Type of subspecies; *H. a. abeillii*, 7 specimens, 3 adult ♂s, 4 adult ♀s, all from Huachunango, eastern Puebla, Mexico.

***Hesperiphona abeillii cobanensis*, subsp. nov.**

GUATEMALAN GROSBEAK.

Type from Coban, Vera Paz, Guatemala, no. 30747, ♂ adult, U. S. National Museum, from Salvin and Godman collection.

General characters.—Entire body of male clearer, brighter yellow than

in typical *abeillii*, specially on the breast; the female much more strongly suffused with buffy brown on underparts; in both sexes bill broader and heavier.

Colors of type.—Entire head and upper neck all around black; upper parts of body nearly uniform dark sulphine yellow shading into lemon chrome over lower rump feathers; underparts nearly uniform chrome yellow, most intense on upper breast and palest on under tail coverts and axillaries; top of wings black with pale parts of tertials more whitish and less gray than in *abeillii*.

Color of female.—Top of head and nape black; upper parts of body dark citrine suffused with sulphine yellow, becoming paler, more yellowish on rump; throat and under parts of body sayal brown, lightest on throat and darkest on flanks; breast and sides of neck suffused with sulphine yellow.

Measurements.—Adult ♂, type, wing, 105; tail, 63; culmen 22; tarsus, 20. Adult ♀, Dueñas, Guatemala, no. 30748, U. S. National Museum. Wing, 105; tail, 63; culmen, 25; tarsus, 21.

Remarks.—In Birds of North and Middle America, part I, p. 45, Robert Ridgway, in a footnote, sets forth the most salient characteristics of the present subspecies but fails to give it a name. In studying the series of *Hesperiphona abeillii* available the male and female specimens from Guatemala referred to by Ridgway differ so strongly from the 3 males and 4 females of typical *abeillii* the evidence appears conclusive that they represent a different and easily recognizable geographic form.